the Waxes and Related Material Category - Comments of Environmental Defense

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Environmental Defense appreciates this opportunity to submit comments on the robust summary/test plan for the Waxes and Related Material Category.

The Petroleum HPV Testing Group of the American.Petroleum Institute proposes that three subcategories of refinery streams and finished products be considered as a single category for consideration under the HPV program. Each of these three streams and finished products, unfinished wax (slack wax), refined/finished wax (paraffin and/or microcrystalline wax) and petrolatum (petroleum jelly) is a complex mixture of hydrocarbons containing 12 to 85 carbons. In support of this proposal the Panel has submitted a clear and concise Test Plan that effectively summarizes an extensive and informative Robust Summary and makes a strong case for their consideration as a category. We support the consideration of these three petroleum streams as a category.

The Robust Summary provides clear descriptions of the numerous studies of the Waxes and Related Material Category and explains why it is not possible to develop or calculate certain chemical/physical data for such
complex mixtures. Paraffin and petroleum jelly are used extensively by the public, but the low water solubility, low volatility and lack of chemical reactivity greatly limit both human and environmental toxicity likely to be associated with human exposure or any release of these compounds into the environment. Use of slack wax is limited to industrial applications; however, an actual discharge of slack wax in the national parks along the British Columbia coastline in 2001 did not result in detection of significant toxicity to aquatic life.

The Test Plan describes how, because of varying petroleum sources and refining conditions, slack wax (the precursor of the other two streams) is the least well defined of the three streams considered. Slack wax contains more polycyclic aromatic compounds and polynuclear compounds along with all the other constituents found in the paraffin and petroleum jelly streams. These facts make slack wax the most likely of the three streams to elicit toxicity. Thus, the Test Plan proposes to conduct repeat dose, reproductive and developmental toxicity, and
genotoxicity on slack wax. The Test Plan proposes that the other two streams should be tested only if significant toxicity is observed with slack wax. This seems a logical course of action and we support this proposed course of testing.

Thank you for this opportunity to comment.

Hazel B. Matthews, Ph.D.
Consulting Toxicologist, Environmental Defense

Karen Florini
Senior Attorney, Environmental Defense